

# COVIDView

A Weekly Surveillance Summary of U.S. COVID-19 Activity

## Key Updates for Week 28, ending July 11, 2020

Nationally, levels of influenza-like illness (ILI) are low overall, but high for this time of year. Changes in indicators that track COVID-19-like illness (CLI) and laboratory confirmed SARS-CoV-2 were inconsistent during the most recent week, with some increasing but others decreasing. This could be due to changes in healthcare seeking behavior around the holiday that occurred during week 27. However, in several regions, those indicators increased compared to the previous week (week 26), suggesting an increasing trend in many areas of the country. Hospitalizations rates, which typically lag behind illness indicators, show an increasing trend. Mortality attributed to COVID-19 decreased compared to last week but is currently above the epidemic threshold and will likely increase as additional death certificates are processed.

## Virus

### Public Health, Commercial and Clinical Laboratories

Nationally, the overall percentage of respiratory specimens testing positive for SARS-CoV-2 decreased slightly from week 27 (9.4%) to week 28 (9.2%) but increased in four regions. National percentages of specimens testing positive for SARS-CoV-2 by type of laboratory:

- Public health laboratories – increased from 6.0% during week 27 to 7.9% during week 28;
- Clinical laboratories – increased from 6.7% during week 27 to 8.1% during week 28;
- Commercial laboratories – decreased from 10.2% during week 27 to 9.6% during week 28.

## Outpatient and Emergency Department Visits

### Outpatient Influenza-Like Illness Network (ILINet) and National Syndromic Surveillance Program (NSSP)

Two surveillance networks are being used to track outpatient or emergency department (ED) visits for illness with symptoms compatible with COVID-19.

- Nationally, ILI activity remains below baseline for the thirteenth week but has increased for 5 weeks now and is atypically high for this time of year. During week 28, most regions reported increases in the percentage of visits for ILI, and several regions also reported increases in CLI activity.
- Recent changes in health care seeking behavior, including increasing use of telemedicine, recommendations to limit emergency department (ED) visits to severe illnesses, and increased practice of social distancing, are likely affecting data reported from both networks, making it difficult to draw conclusions at this time. Tracking these systems moving forward will give additional insight into illness related to COVID-19.

## Severe Disease

### Hospitalizations

Cumulative COVID-19-associated hospitalization rates since March 1, 2020, are updated weekly. The overall cumulative COVID-19 hospitalization rate is 113.6 per 100,000, with the highest rates in people aged 65 years and older (321.8 per 100,000) and 50-64 years (171.8 per 100,000). From June 20 – July 4, there was a two week consecutive increase in overall weekly hospitalization rates, the first multiple-week increase seen since early April.

### Mortality

Based on death certificate data, the percentage of deaths attributed to pneumonia, influenza or COVID-19 (PIC) decreased from 8.1% during week 27 to 6.4% during week 28, representing the twelfth week of a declining percentage of deaths due to PIC. The percentage is currently above the epidemic threshold and will likely change as more death certificates are processed, particularly for recent weeks.

*All data are preliminary and may change as more reports are received. A description of the surveillance systems summarized in COVIDView, including methodology and detailed descriptions of each data component, is available on the [surveillance methods](#) page.*

## Key Points

- There are increases in the percentage of specimens testing positive for SARS-CoV-2 and percentage of visits for ILI and/or CLI in multiple parts of the country. Three HHS regions (Regions 4 [South East], 6 [South Central] and 9 [South West/Coast]) are reporting percentage of visits for CLI and/or percentage of specimens testing positive for SARS-CoV-2 at higher levels than were seen in March/April.
- Using combined data from the three laboratory types, the national percentage of respiratory specimens testing positive for SARS-CoV-2 with a molecular assay decreased slightly from week 27 (9.4%) to week 28 (9.2%).
  - The highest percentages of specimens testing positive for SARS-CoV-2 were seen in Regions 4 (South East, 14.0%), 6 (South Central, 17.1%) and 9 (South West/Coast, 11.2%).
  - Increases were reported in four of ten HHS surveillance regions: Regions 2 (NY/NJ/Puerto Rico), 5 (Midwest), 7 (Central) and 8 (Mountain).
  - Six HHS regions (Regions 1 [New England], 3 [Mid-Atlantic], 4 [South East], 6 [South Central], 9 [South West/Coast] and 10 [Pacific Northwest]) reported a stable or decreasing percentage of specimens testing positive for SARS-CoV-2 during week 28 compared to week 27. However, the percentage of specimens testing positive for SARS-CoV-2 in Regions 4 (South East) and 6 (South Central) were higher during week 28 than week 26. Week 27 included a holiday that could have affected both testing and reporting practices during that week.
- The percentage of outpatient and emergency department visits for ILI are below baseline nationally and in all regions of the country; however, increases in the percentage of visits for ILI and/or CLI were reported in seven of ten HHS surveillance regions when compared to week 27 and in nine surveillance regions when compared to week 26. This could be due to changes in healthcare seeking behavior around the holiday that occurred during week 27.
  - Systems monitoring ILI and CLI may be influenced by recent changes in health care seeking behavior, including increasing use of telemedicine, recommendations to limit emergency department (ED) visits to severe illnesses, and increased practice of social distancing.
- The overall cumulative COVID-19 associated hospitalization rate is 113.6 per 100,000, with the highest rates in people 65 years of age and older (321.8 per 100,000) followed by people 50-64 years (171.8 per 100,000). Hospitalization rates are cumulative and will increase as the pandemic continues.
  - From week 25 – week 27 (June 20 – July 4), there was a two consecutive week increase in overall weekly hospitalization rates. This is the first time since early April that an increase in weekly hospitalization rates has been observed over a multiple-week period.
  - Non-Hispanic American Indian or Alaska Native persons have an age-adjusted hospitalization rate approximately 5.6 times that of non-Hispanic White persons and non-Hispanic Black persons and Hispanic or Latino persons have a rate approximately 4.6 times that of non-Hispanic White persons.
  - Overall cumulative hospitalization rates for COVID-19 at this time are higher than cumulative end-of-season hospitalization rates for influenza over each of the past 5 influenza seasons. However, for children (0-17 years), cumulative COVID-19 hospitalization rates are much lower than cumulative influenza hospitalization rates during recent influenza seasons.
- Based on death certificate data, the percentage of deaths attributed to pneumonia, influenza or COVID-19 (PIC) decreased from 8.1% during week 27 to 6.4% during week 28, representing the twelfth consecutive week during which a declining percentage of deaths due to PIC has been recorded. The percentage is currently above the epidemic threshold and will likely change as additional death certificates for deaths during recent weeks are processed.

## U.S. Virologic Surveillance

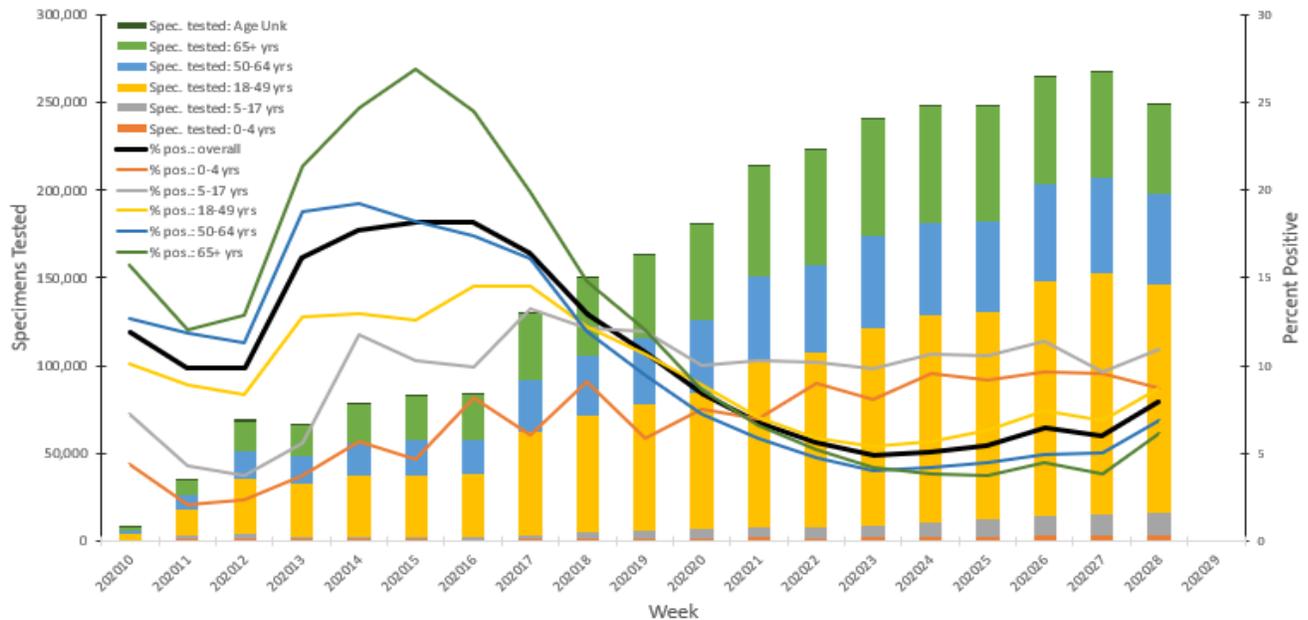
The number of specimens tested for SARS-CoV-2 using a molecular assay and reported to CDC by public health laboratories and a subset of clinical and commercial laboratories in the United States are summarized below. All laboratories are performing primary diagnostic functions; therefore, the percentage of specimens testing positive across laboratory types can be used to monitor overall trends in COVID-19 activity. As the outbreak progresses, it is possible that different types of laboratories will take on different roles, and the data interpretation may need to change.

Summary of Laboratory Testing Results Reported to CDC*	Week 28 (July 5 – July 11, 2020)	Cumulative since March 1, 2020
<b>No. of specimens tested</b>	1,650,622	25,502,956
<b>Public Health Laboratories</b>	249,261	3,002,829
<b>Clinical Laboratories</b>	141,569	2,507,197
<b>Commercial Laboratories</b>	1,259,792	19,992,930
<b>No. of positive specimens (%)</b>	151,503 (9.2%)	2,461,009 (9.6%)
<b>Public Health Laboratories</b>	19,680 (7.9%)	256,823 (8.6%)
<b>Clinical Laboratories</b>	11,512 (8.1%)	158,150 (6.3%)
<b>Commercial Laboratories</b>	120,311 (9.6%)	2,046,036 (10.2%)

\* Commercial and clinical laboratory data represent select laboratories and do not capture all tests performed in the United States.

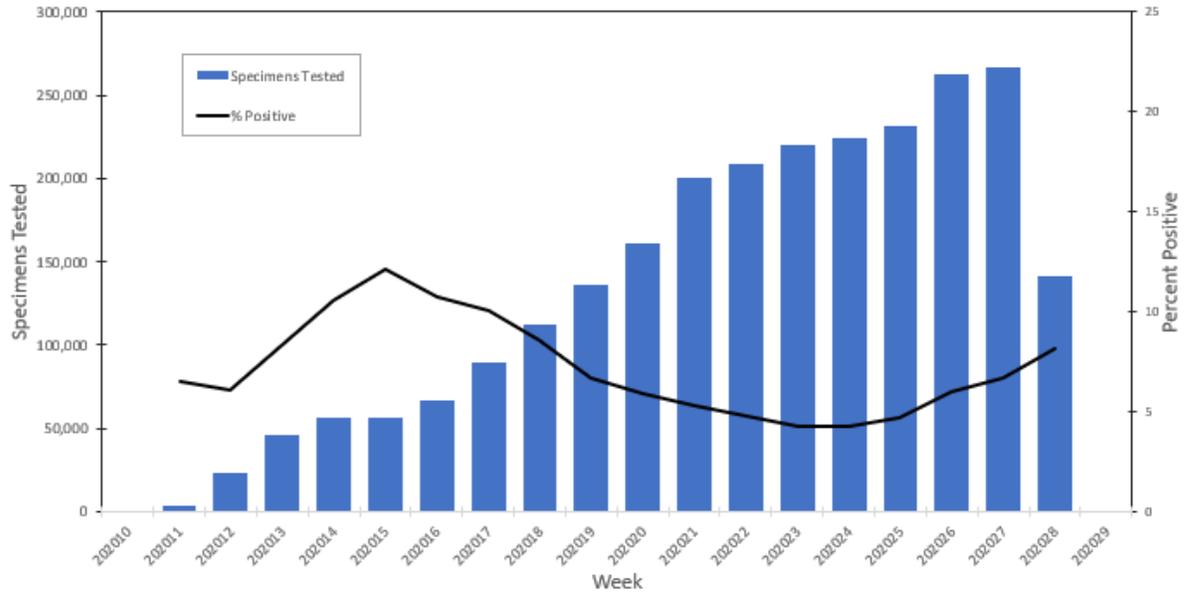
## Public Health Laboratories

U.S. State and Local Public Health Laboratories Reporting to CDC:  
Number of Specimens Tested and Percent Positive for SARS-CoV-2  
March 1, 2020 – July 11, 2020



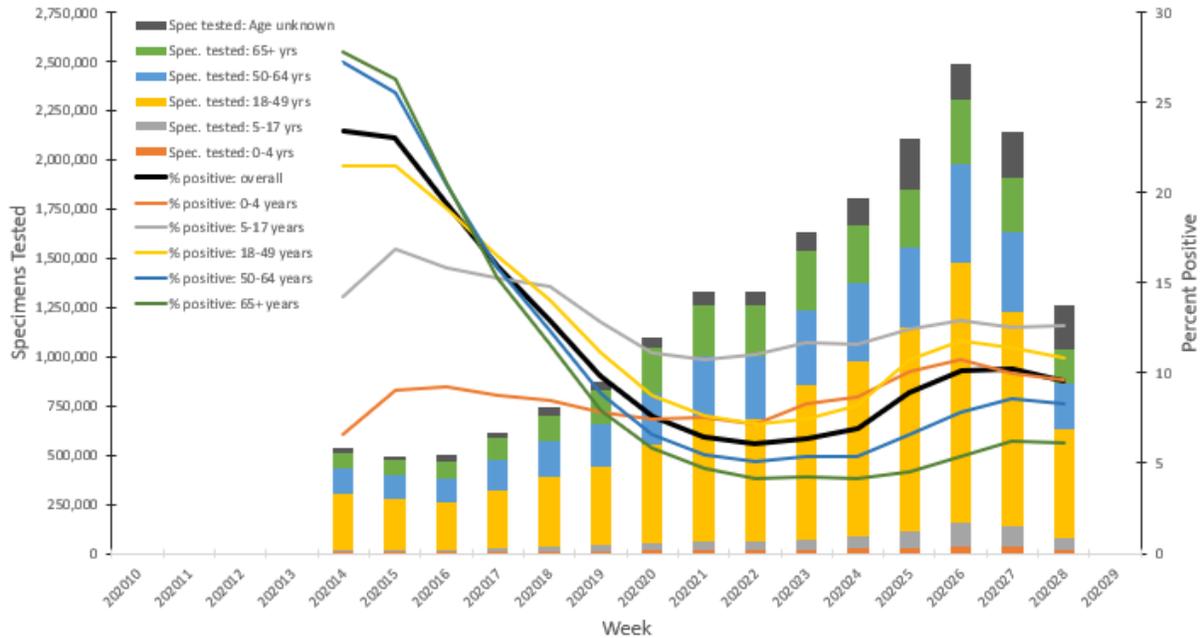
## Clinical Laboratories

U.S. Clinical Laboratories Reporting to the National Respiratory and Enteric Virus Surveillance System:  
Number of Specimens Tested and Percent Positive for SARS-CoV-2  
March 8, 2020 – July 11, 2020



## Commercial Laboratories

Select Commercial Laboratories Reporting to CDC:  
Number of Specimens Tested and Percent Positive for SARS-CoV-2  
March 29, 2020 - July 11, 2020



\* Commercial laboratories began testing for SARS-CoV-2 in early March, but the number and geographic distribution of reporting commercial laboratories became stable enough to calculate a weekly percentage of specimens testing positive as of March 29, 2020.

**Additional virologic surveillance information:** [Surveillance Methods](#)



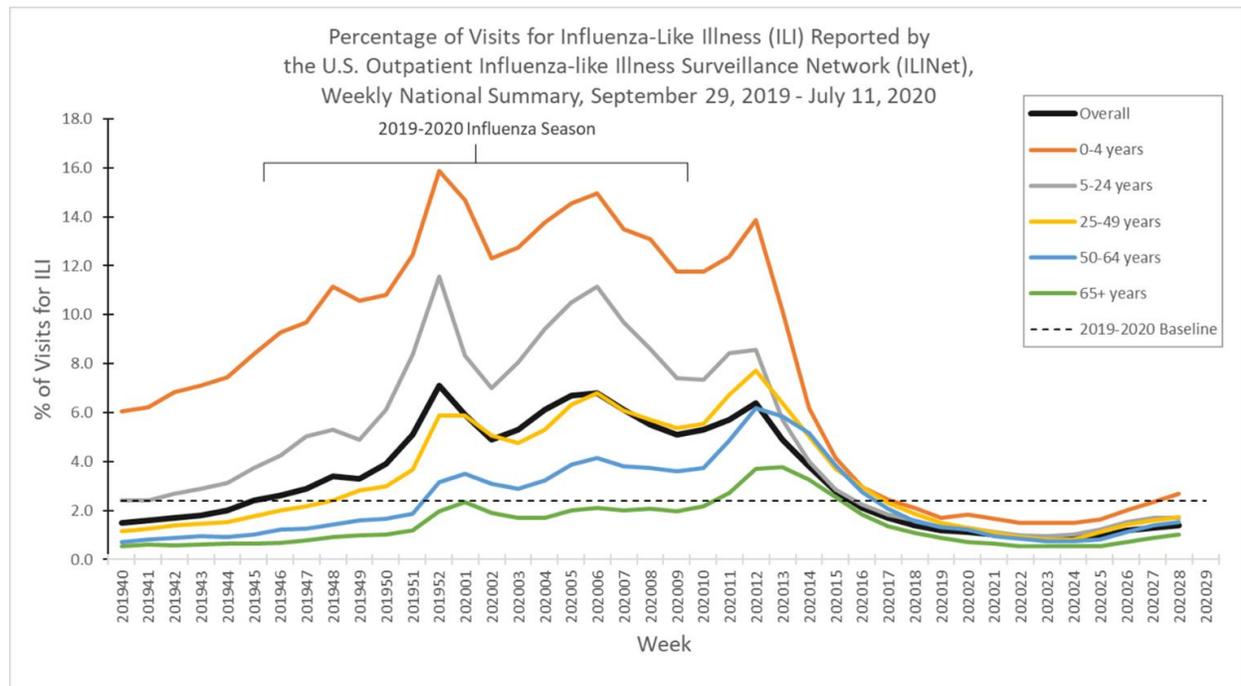
## Outpatient/Emergency Department Illness

Two syndromic surveillance systems are being used to monitor trends in outpatient and emergency department visits that may be associated with COVID-19 illness. Each system monitors a slightly different syndrome, and together these systems provide a more comprehensive picture of mild to moderate COVID-19 illness than either would individually. Both systems are currently being affected by recent changes in healthcare seeking behavior, including increased use of telemedicine, compliance with recommendations to limit emergency department (ED) visits to severe illnesses, and increased practice of social distancing. These changes affect the numbers of people seeking care in the outpatient and ED settings and their reasons for doing so.

## **ILINet**

The U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) provides data on visits for influenza-like illness (ILI) (fever  $\geq 100^{\circ}\text{F}$ ) and cough and/or sore throat) to approximately 2,600 primary care providers, emergency departments and urgent care centers in all 50 states, Puerto Rico, the District of Columbia and the U.S. Virgin Islands. Mild COVID-19 illness presents with symptoms similar to ILI, so ILINet is being used to track trends of mild to moderate COVID-19 illness and allows for comparison with prior influenza seasons.

Nationwide during week 28, 1.4% of patient visits reported through ILINet were due to ILI. This percentage is well below the national baseline of 2.4% but is increasing, which is atypical for this time of year compared to previous influenza seasons. The pattern of increasing percentage of visits for ILI was reported for 0-4 year olds and persons 25 years of age and older.



\* Age-group specific percentages should not be compared to the national baseline.

On a [regional level](#), the percentage of outpatient visits for ILI ranged from 0.5% to 2.3% during week 28. All ten regions are below their region-specific baselines; however, compared to week 27, the percentage of visits for ILI during week 28 increased in seven of the ten regions (Regions 2

[NY/NJ/PR], 3 [Mid-Atlantic], 4 [South East], 5 [Midwest], 7 [Central], 8 [Mountain], and 9 [South/West Coast] and remained stable in two regions (Regions 1 [New England] and 10 [Pacific Northwest]). In Regions 6 (South Central) and 10 [Pacific Northwest], the percentage of visits for ILI reported during week 28 was less than or the same as the percentage reported during week 27 but greater than the percentage reported for week 26. This could be due to changes in healthcare seeking behavior around the holiday that occurred during week 27.

Note: In response to the COVID-19 pandemic, new data sources will be incorporated into ILINet as we move into summer weeks when lower levels of influenza and other respiratory virus circulation are typical. Starting in week 21, increases in the number of patient visits will be seen as new sites are enrolled and the percentage of visits for ILI may change in comparison to previous weeks. While all regions remain below baseline levels for ILI, these system changes should be kept in mind when drawing conclusions from these data. Any changes in ILI due to changes in respiratory virus circulation will be highlighted here.

### ILI Activity Levels

Data collected in ILINet are used to produce a measure of [ILI activity](#) for all 50 states, Puerto Rico, the District of Columbia and New York City. The mean reported percentage of visits due to ILI for the current week is compared to the mean reported during non-influenza weeks, and the activity levels correspond to the number of standard deviations below, at or above the mean.

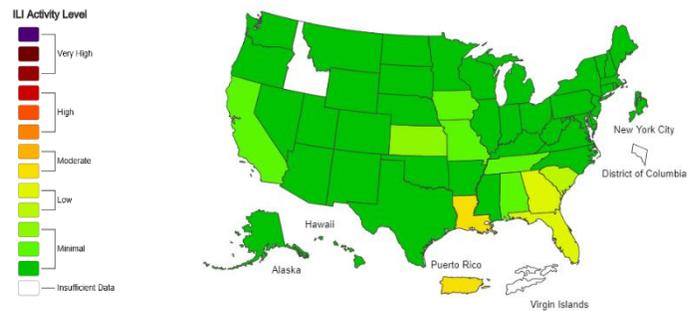
The number of jurisdictions at each activity level during week 28 and the change compared to the previous week are summarized in the table below and shown in the following maps.

Activity Level	Number of Jurisdictions	
	Week 28 (Week ending July 11, 2020)	Compared to Previous Week
<b>Very High</b>	0	No change
<b>High</b>	0	No change
<b>Moderate</b>	2	+2
<b>Low</b>	3	No change
<b>Minimal</b>	46	-4
<b>Insufficient Data</b>	3	+2

ILI Activity Level Map, Week 27 Ending July 4, 2020



ILI Activity Level Map, Week 28, Ending July 11, 2020



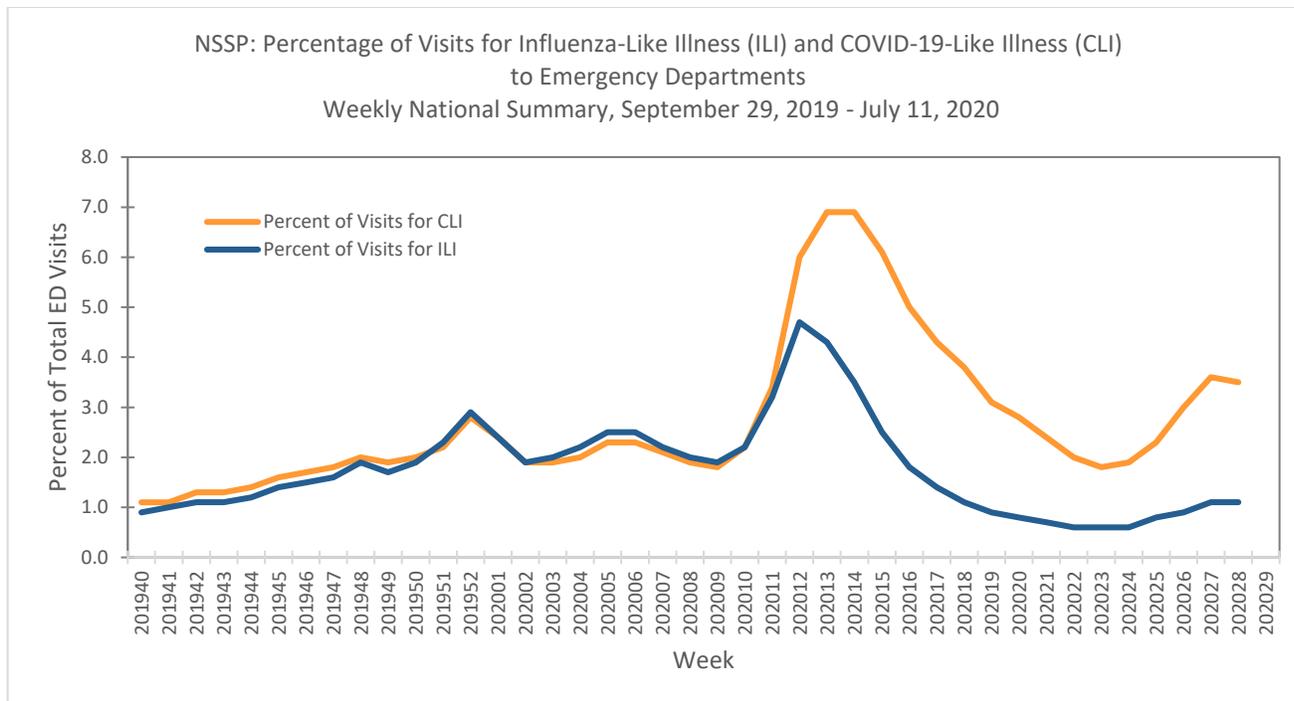
\*Data collected in ILINet may disproportionately represent certain populations within a state and may not accurately depict the full picture of influenza activity for the whole state. Differences in the data presented here by CDC and independently by some state health departments likely represent differing levels of data completeness with data presented by the state likely being the more complete.

**National Syndromic Surveillance Program (NSSP): Emergency Department (ED) Visits**

NSSP is a collaboration among CDC, federal partners, local and state health departments and academic and private sector partners to collect, analyze and share electronic patient encounter data received from multiple healthcare settings. To track trends of potential COVID-19 visits, visits for COVID-19-like illness (CLI) (fever and cough or shortness of breath or difficulty breathing or presence of a coronavirus diagnosis code) and ILI to a subset of emergency departments in 47 states are being monitored.

Nationwide during week 28, 3.5% of emergency department visits captured in NSSP were due to CLI and 1.1% were due to ILI. In comparison to week 27, this week there was a slight decrease in the percentage of visits for CLI and ILI remained steady. However, both CLI and ILI percentages during week 28 were higher than they were in week 26. This could be due to changes in healthcare seeking behavior around the holiday that occurred during week 27.

During week 28, five of [10 HHS regions](#) (Regions 3 [Mid-Atlantic], 4 [South East], 5 [Midwest], 7 [Central], and 8 [Mountain]) reported a stable or increasing percentages of visits for both CLI and ILI compared to week 27. Three regions (Regions 6 [South Central], 9 [South/West Coast], and 10 [Pacific Northwest]) reported a decreasing percentage of visits for CLI and ILI during week 28 compared to week 27 but the week 28 percentage of visits for CLI and/or ILI was higher than what was reported for week 26. This could be due to changes in healthcare seeking behavior around the holiday that occurred during week 27. Regions 1 (New England) and 2 (NY/NJ/PR) have not reported an increase in CLI or ILI in recent weeks.



**Additional information about medically attended outpatient and emergency department visits for ILI and CLI:** [Surveillance Methods](#)

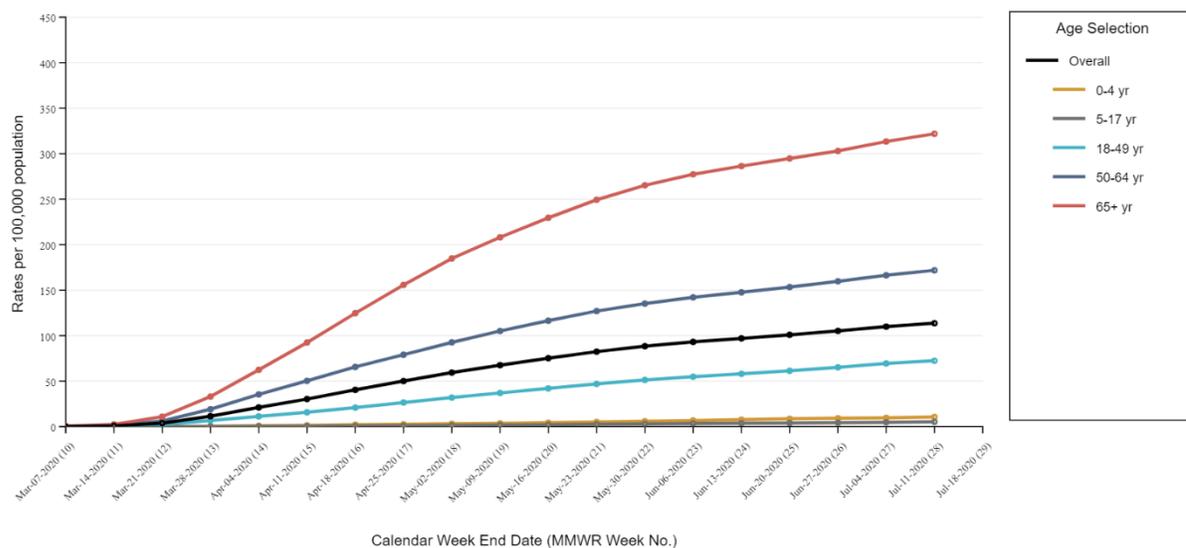
### **Hospitalizations**

The COVID-19-Associated Hospitalization Surveillance Network (COVID-NET) conducts population-based surveillance for laboratory-confirmed COVID-19-associated hospitalizations in select counties participating in the Emerging Infections Program (EIP) and the Influenza Hospitalization Surveillance Project (IHSP).

A total of 37,052 laboratory-confirmed COVID-19-associated hospitalizations were reported by sites between March 1, 2020 and July 11, 2020. The overall cumulative hospitalization rate was 113.6 per 100,000 population. Among the 0-4 years, 5-17 years, 18-49 years, 50-64 years, and  $\geq 65$  years age groups, the highest rate of hospitalization is among adults aged  $\geq 65$ , followed by adults aged 50-64 years and adults aged 18-49 years.

## Laboratory-Confirmed COVID-19-Associated Hospitalizations

Preliminary cumulative rates as of Jul 11, 2020

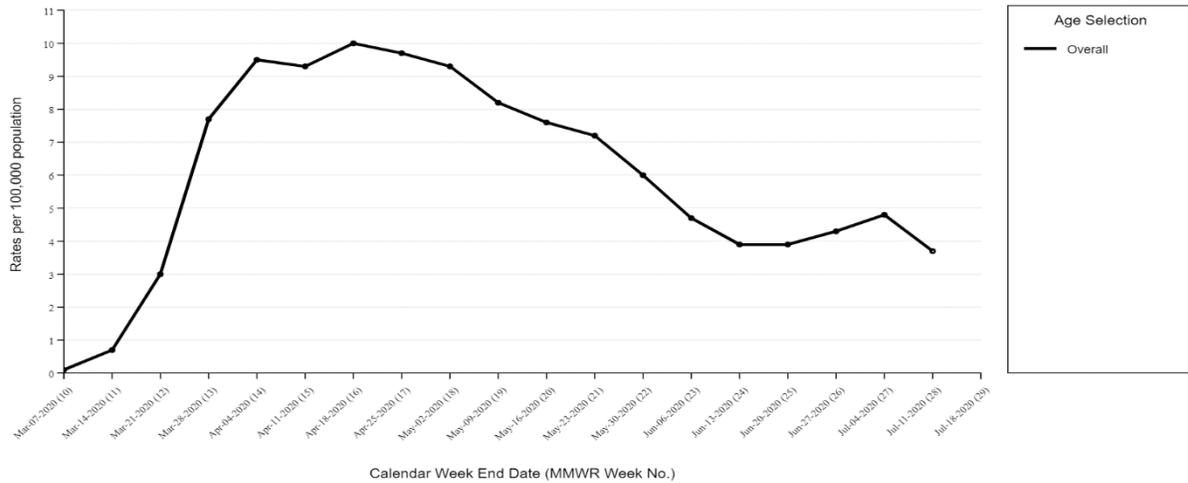


Age Group	Cumulative Rate per 100,000 Population
<b>Overall</b>	113.6
<b>0-4 years</b>	10.6
<b>5-17 years</b>	5.3
<b>18-49 years</b>	72.4
18-29 years	42.7
30-39 years	70.9
40-49 years	112.5
<b>50-64 years</b>	171.8
<b>65+ years</b>	321.8
65-74 years	236.1
75-84 years	382.1
85+ years	607.3

From June 20 (MMWR week 25) – July 4 (MMWR week 27), there was a two consecutive week increase in overall weekly hospitalization rates. This is the first time since early April that an increase in weekly hospitalization rates has been observed over a multiple-week period. Data for week ending July 11 (MMWR week 28) currently show a decline; however, those data are likely to change as more data for admissions occurring during that week are received.

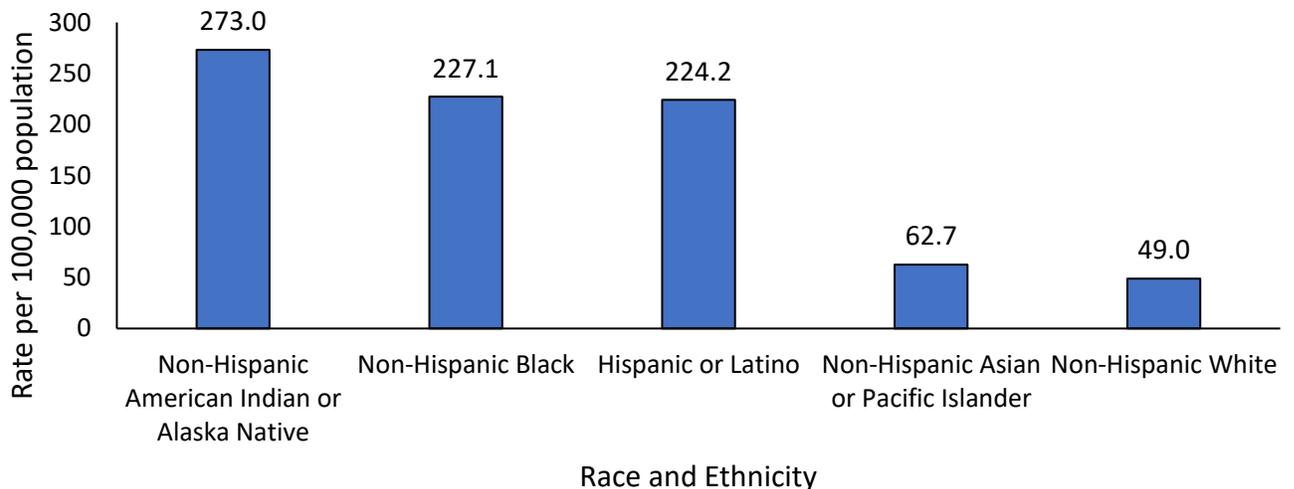
### Laboratory-Confirmed COVID-19-Associated Hospitalizations

Preliminary weekly rates as of Jul 11, 2020



Among the 37,052 laboratory-confirmed COVID-19-associated hospitalized cases, 34,669 (93.6%) had information on race and ethnicity while collection of race and ethnicity was still pending for 2,383 (6.4%) cases. When examining overall age-adjusted rates by race/ethnicity, non-Hispanic American Indian or Alaska Native persons have an age-adjusted hospitalization rate approximately 5.6 times that of non-Hispanic White persons. Rates for non-Hispanic Black persons and Hispanic or Latino persons were approximately 4.6 times the rate among non-Hispanic White persons.

### Age-adjusted COVID-19-associated hospitalization rates by race and ethnicity — COVID-NET, March 1–July 11, 2020



When examining age-stratified crude hospitalization rates by race and ethnicity, compared with non-Hispanic white persons in the same age group, crude hospitalization rates were 8.1 times higher among Hispanic or Latino persons aged 0-17 years; 10.6 times higher among non-Hispanic American Indian or Alaska Native persons aged 18-49 years; 7.6 times higher among non-Hispanic American Indian or Alaska Native persons aged 50-64 years; and 3.8 times higher among non-Hispanic Black person aged  $\geq$  65 years.

**Hospitalization rates per 100,000 population  
by age and race and ethnicity — COVID-NET,  
March 1, 2020–July 11, 2020**

Age Category	Non-Hispanic American Indian or Alaska Native		Non-Hispanic Black		Hispanic or Latino		Non-Hispanic Asian or Pacific Islander		Non-Hispanic White	
	Rate <sup>1</sup>	Rate Ratio <sup>2</sup>	Rate <sup>1</sup>	Rate Ratio <sup>2</sup>	Rate <sup>1</sup>	Rate Ratio <sup>2</sup>	Rate <sup>1</sup>	Rate Ratio <sup>2</sup>	Rate <sup>1</sup>	Rate Ratio <sup>2</sup>
0-17y	7.8	4.6	8.2	4.8	13.8	8.1	3.6	2.1	1.7	1.0
18-49y	201	10.6	107.7	5.7	177.7	9.4	31.9	1.7	18.9	1.0
50-64y	491.8	7.6	353.8	5.5	387.4	6.0	102.8	1.6	64.9	1.0
65+y	593	3.0	743.1	3.8	474.6	2.4	196.1	1.0	196.3	1.0
Overall rate <sup>3</sup> (age-adjusted)	273.0	5.6	227.1	4.6	224.2	4.6	62.7	1.3	49.0	1.0

<sup>1</sup> COVID-19-associated hospitalization rates by race/ethnicity are calculated using hospitalized COVID-NET cases with known race and ethnicity for the numerator and [NCHS bridged-race population estimates](#) for the denominator.

<sup>2</sup> For each age category, rate ratios are the ratios between crude hospitalization rates within each racial/ethnic group and the crude hospitalization rate among non-Hispanic white persons in the same age category.

<sup>3</sup> Overall rates are adjusted to account for differences in age distributions within race/ethnicity strata in the COVID-NET catchment area; the age strata used for the adjustment include 0-17, 18-49, 50-64, and 65+ years.

Non-Hispanic White persons and non-Hispanic Black persons represent the highest proportions of hospitalized cases reported to COVID-NET, followed by Hispanic or Latino, non-Hispanic Asian or Pacific Islander, and non-Hispanic American Indian or Alaska Native persons. However, some racial and ethnic groups are disproportionately represented among hospitalized cases as compared with the overall population of the catchment area. Prevalence ratios show a similar pattern to that of the age-adjusted hospitalization rates: non-Hispanic American Indian or Alaska Native persons have the highest prevalence ratio, followed by non-Hispanic Black, and Hispanic or Latino persons.

**Comparison of proportions of COVID-19-Associated Hospitalizations, by race and ethnicity, COVID-NET, March 1–July 11, 2020**

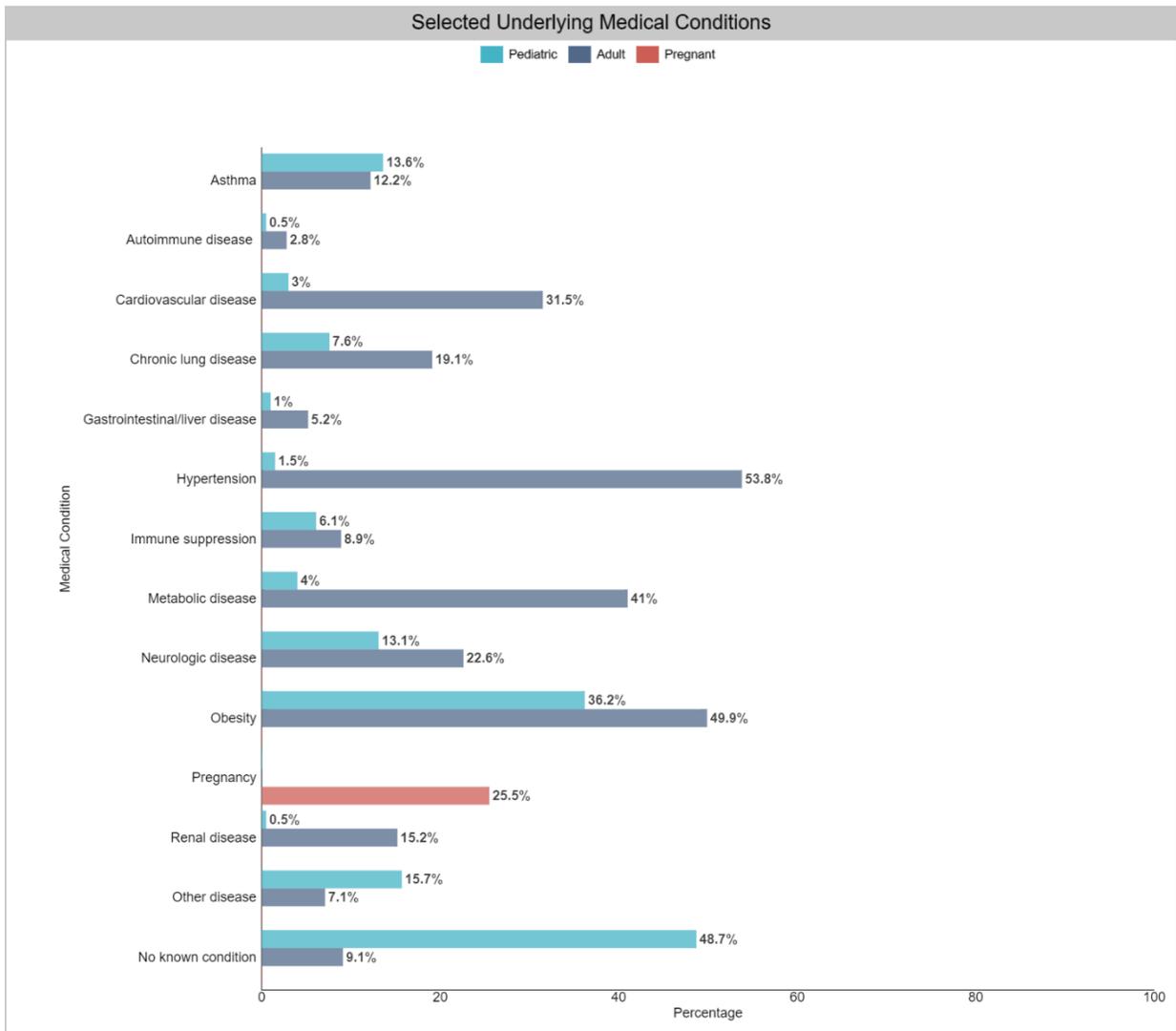
	Non-Hispanic American Indian or Alaska Native	Non- Hispanic Black	Hispanic or Latino	Non-Hispanic Asian or Pacific Islander	Non- Hispanic White
Proportion of hospitalized COVID-NET cases <sup>1</sup>	1.5%	32.6%	22.7%	4.8%	32.0%
Proportion of population in COVID-NET catchment area	0.7%	17.7%	14.0%	8.8%	58.8%
Prevalence ratios <sup>2</sup>	2.1	1.8	1.6	0.5	0.5

<sup>1</sup> Persons of multiple races (0.2%) or unknown race and ethnicity (6.1%) are not represented in the table but are included as part of the denominator.

<sup>2</sup> Prevalence ratio is calculated as the ratio of the proportion of hospitalized COVID-NET cases over the proportion of population in COVID-NET catchment area.

Among 9,736 hospitalized adults with information on underlying medical conditions, 90.9% had at least one reported underlying medical condition. The most commonly reported were hypertension, obesity, chronic metabolic disease and cardiovascular disease. Among 199 hospitalized children with information on underlying conditions, 51.3% had at least one reported underlying medical condition. The most commonly reported were obesity, asthma and neurologic conditions.

COVID-19 Laboratory-Confirmed Hospitalizations  
Preliminary data as of Jul 11, 2020



[Additional data](#) on demographics, signs and symptoms at admission, underlying conditions, interventions, outcomes, and discharge diagnoses, stratified by age, sex, and race and ethnicity, are available.

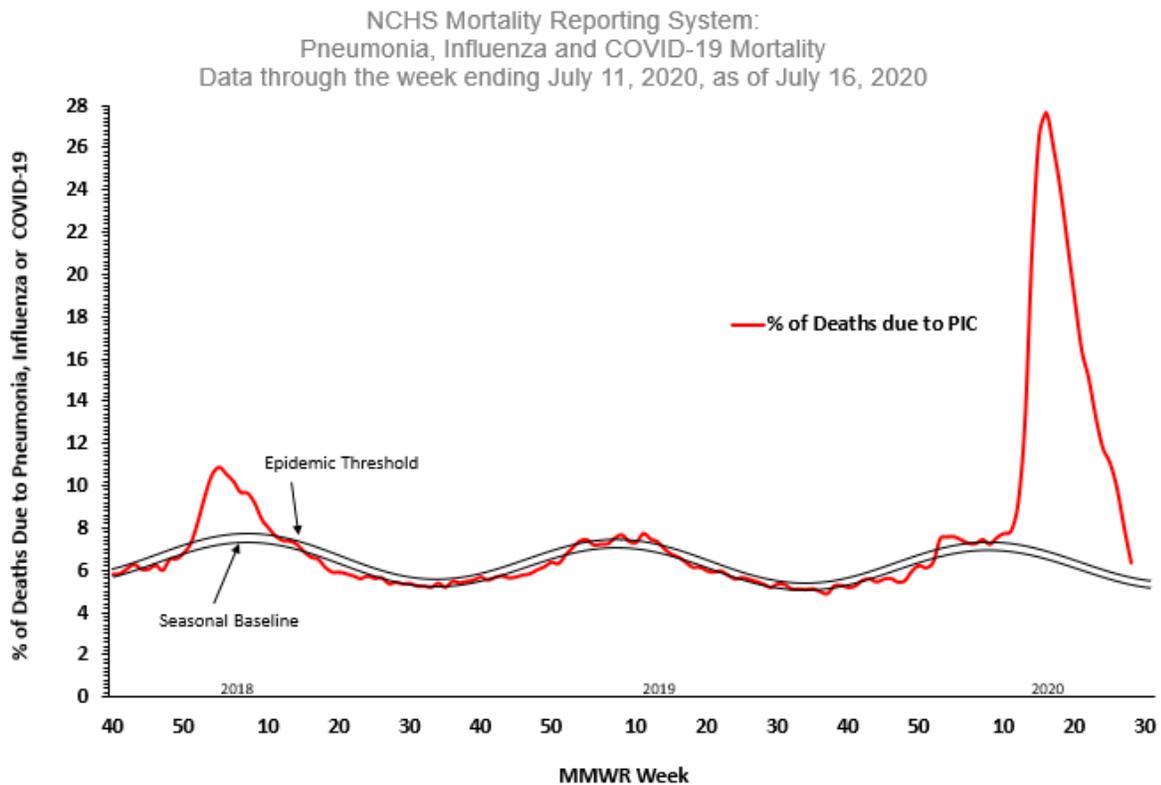
**Additional hospitalization surveillance information:**

[Surveillance Methods](#) | [Additional rate data](#) | [Additional demographic and clinical data](#)

## **Mortality Surveillance**

The National Center for Health Statistics (NCHS) collects death certificate data from vital statistics offices for all deaths occurring in the United States. Based on death certificate data available on July 16, 2020, 6.4% of all deaths occurring during the week ending July 11, 2020 (week 28) were due to pneumonia, influenza or COVID-19 (PIC). This is the twelfth consecutive week of a declining percentage of deaths due to PIC. The percentage is above the epidemic threshold of 5.7% for week 28. Data for recent weeks are incomplete, and the PIC percentage may increase as more death certificates representing deaths during these weeks are processed.

Weekly mortality surveillance data include a combination of machine coded and manually coded causes of death collected from death certificates. Percentages of deaths due to PIC are higher among manually coded records than more rapidly available machine coded records. Due to the additional time needed for manual coding, the initially reported PIC percentages may be lower than percentages calculated from final data.



\*Data during recent weeks are incomplete because of the lag in time between when the death occurred and when the death certificate is completed, submitted to NCHS and processed for reporting purposes.

**Additional NCHS mortality surveillance information:** [Surveillance Methods](#) | [Provisional Death Counts for COVID-19](#)

Report prepared: July 16, 2020

Detailed data tables are available on the [COVIDView page](#)